

CLAIMS

1. A method, comprising:
  - generating a detection zone having a first perimeter;
  - generating a deactivation zone having a second perimeter, with said second perimeter being less than said first perimeter to form an expanded zone between said first and second perimeters;
  - detecting an electronic article surveillance marker within said expanded zone;
  - determining a state for said electronic article surveillance marker; and
  - generating a notification signal in accordance with said determination.
2. The method of claim 1, wherein said state is an active state, and said generating comprises generating a first notification signal to indicate that said electronic article surveillance marker is within said expanded zone in an active state.
3. The method of claim 2, wherein said first notification signal comprises a first audio signal and a first visual signal.
4. The method of claim 1, wherein said state is an inactive state, and said generating comprises generating a second notification signal to indicate that said electronic article surveillance marker is within said expanded zone in an inactive state.
5. The method of claim 4, wherein said second notification signal comprises a second audio signal and a second visual signal.
6. The method of claim 1, wherein said state is an active state, and further comprising:
  - detecting that said electronic article surveillance marker is exiting said expanded zone in said active state; and
  - generating a third notification signal to indicate that said electronic article surveillance marker is exiting said expanded zone in said active state.

7. The method of claim 1, wherein said state is an active state, and further comprising:

receiving said electronic article surveillance marker in said active state within said deactivation zone;

deactivating said electronic article surveillance marker by changing said active state to an inactive state; and

generating a fourth notification signal to indicate that said electronic article surveillance marker has been deactivated.

8. An apparatus, comprising:

a detection module to generate a detection zone having a first perimeter;

a deactivation module to generate a deactivation zone having a second perimeter, with said second perimeter being less than said first perimeter to form an expanded zone between said first and second perimeters;

a notification module to connect to said detection module and said deactivation module, said notification module to provide audible and visual notification in accordance with a notification signal generated by one of said detection module and deactivation module; and

wherein said detection module is configured to detect an electronic article surveillance marker within said expanded zone, determine a state for said electronic article surveillance marker, and generate a notification signal in accordance with said state for said electronic article surveillance marker.

9. The apparatus of claim 8, further comprising:

a speaker to connect to said notification module; and

a light emitting diode to connect to said notification module.

10. The apparatus of claim 9, wherein said detection module determines that said electronic article surveillance marker is in an active state, and generates a first

notification signal to indicate that said electronic article surveillance marker is within said expanded zone in an active state.

11. The apparatus of claim 10, wherein said notification module receives said first notification signal, and sends a first audio signal to said speaker to produce a first audible sound, and sends a first visual signal to said light emitting diode to produce a first visual indicator.

12. The apparatus of claim 9, wherein said detection module determines that said electronic article surveillance marker is in an inactive state, and generates a second notification signal to indicate that said electronic article surveillance marker is within said expanded zone in an inactive state.

13. The apparatus of claim 12, wherein said notification module receives said second notification signal, and sends a second audio signal to said speaker to produce a second audible sound, and sends a second visual signal to said light emitting diode to produce a second visual indicator.

14. The apparatus of claim 9, wherein said detection module determines that said electronic article surveillance marker is in an active state and is exiting said expanded zone, said detection module to generate a third notification signal to indicate that said electronic article surveillance marker is exiting said expanded zone in said active state.

15. The apparatus of claim 14, wherein said notification module receives said third notification signal, and sends a third audio signal to said speaker to produce a third audible sound, and sends a third visual signal to said light emitting diode to produce a third visual indicator.

16. The apparatus of claim 9, wherein said deactivation module deactivates said electronic article surveillance marker by changing said active state to an inactive state when said electronic article surveillance marker enters said deactivation zone, said

deactivation module to generate a fourth notification signal to indicate that said electronic article surveillance marker has been deactivated.

17. The apparatus of claim 16, wherein said notification module receives said fourth notification signal, and sends a fourth audio signal to said speaker to produce a fourth audible sound, and sends a fourth visual signal to said light emitting diode to produce a fourth visual indicator.

18. The apparatus of claim 9, further comprising:  
a set of antennas to form an interrogation zone;  
a marker detector to connect to said set of antennas, said marker detector to detect an electronic article surveillance marker when in said interrogation zone;  
a processing system to receive and process signals from said marker detector; and  
an alarm system to connect to said processing system, said alarm system to produce an alarm in response to said processed signals.

19. The apparatus of claim 9, further comprising an electronic article surveillance marker, said electronic article surveillance marker to produce an active signal in response to an interrogation signal when in an active state, and an inactive signal in response to said interrogation signal when in an inactive state.